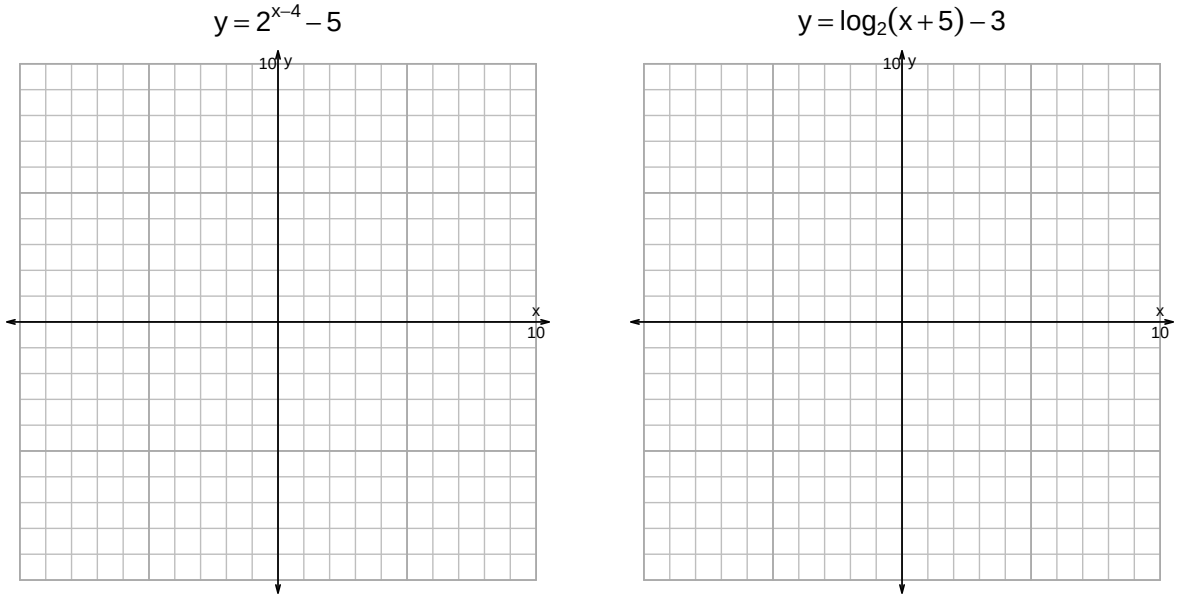
Name: Date:

s18quiz: EXP LOG (Practice v111)

1. Graph $y = 2^{x-4} - 5$ and $y = \log_2(x+5) - 3$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$29 = \left(\frac{4}{3}\right) \cdot 10^{5t/7}$$

3. An exponential function $f(x) = 0.0753 \cdot e^{-2.07x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(-1.2)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(20)$.